

REMARKS

Favorable reconsideration of this application as currently amended and in light of the following discussion is respectfully requested.

Claims 2-7, 17, 18, and 20 are pending in the present application. Claims 1, 8-16, and 19 have been cancelled without prejudice and Claims 2-7 have been amended by the present amendment.

In the outstanding Office Action, Claims 1-7 and 16-20 were rejected under 35 U.S.C. § 112, second paragraph; Claims 1, 16, and 19 were rejected under 35 U.S.C. § 102(e) as anticipated by Sakakima et al. (U.S. Patent No. 6,077,618, herein “Sakakima”); and Claims 2-7, 17, 18, and 20 were indicated as allowable if rewritten to overcome the above-noted rejection under 35 U.S.C. § 112, second paragraph.

Applicants thank the Examiner for the indication of allowable subject matter. In view of this indication, rejected Claims 1, 16, and 19 have been canceled and Claims 2 and 5 have been amended to overcome the rejection under 35 U.S.C. § 112, second paragraph. Thus, Applicants believe that independent Claims 2 and 5 and each of the claims depending therefrom are in condition for allowance.

Applicants respectfully request entry of the present amendment under 37 CFR § 1.116 because the present amendment reduces the number of issues for appeal by canceling Claims 1, 16, and 19 and places the remaining claims in better form for consideration on appeal by amending Claims 2 and 5 to clarify features of the present invention.

Regarding the rejection of Claims 1-7 and 16-20 under 35 U.S.C. § 112, second paragraph, Claims 1, 16, and 19 have been cancelled and Claims 2 and 5 have been amended to clarify the features noted as unclear in the outstanding Office Action. More specifically, Claims 2 and 5 have been amended to recite “a single pillar electrode portion” that has “a

sectional film area smaller than an area of the principal plane of the stacked film" and "the magnetoresistance effect element being configured such that the sense current flows only through the single pillar electrode portion." The claim amendments find support in Figure 1 and its corresponding description in the specification. No new matter has been added.

Accordingly, it is respectfully submitted this rejection be withdrawn.

Regarding the rejection of Claims 1, 16, and 19 under 35 U.S.C. § 102(e) as anticipated by Sakakima, that rejection is moot because Claims 1, 16, and 19 have been canceled. However, Sakakima is discussed regarding independent Claims 2 and 5.

Briefly recapitulating, independent Claim 2 is directed to a magnetoresistance effect element that has a stacked film and an electrode connected to a part of a principle plane of the stacked film. The electrode includes a single pillar electrode portion substantially perpendicularly extending from the principal plane of the stacked film and has a sectional film area smaller than an area of the principal plane of the stacked film. The electrode also includes a feed portion connected to the single pillar electrode portion and the magnetoresistance effect element is configured such that a sense current flows only through the single pillar electrode portion. Independent Claim 5 has been amended similar to Claim

1.

In a non-limiting example, Figure 1 shows the magnetoresistive effect element 10 having the stacked film 13, the single pillar electrode portion 14, and the feed portion 15.

Turning to the applied art, Sakakima shows in Figures 5a, 5b, 6, and 7 a magnetoresistance element having a free layer 1, a fixed layer 3, and a nonmagnetic insulating layer 2 formed between the free layer 1 and the fixed layer 3. Figure 7 of Sakakima shows that the insulating layer 2 has a sectional area smaller than either the area of the free layer 1 or the fixed layer 3. However, layer 2 of Sakakima is an insulation layer and

not an electrode as required by Claims 2 and 5. In addition, Sakakima is silent about a single pillar electrode portion substantially perpendicularly extending from the principal plane of a stacked film and a magnetoresistive effect element configured such that a sense current flows only through the single pillar electrode portion, as required by Claims 2 and 5.

Even if the outstanding Office Action asserts that Sakakima shows in Figure 4 an electrode W, Applicants respectfully submit that W is a word line as disclosed in Sakakima at column 6, lines 57-65, and the word line W shown in Figure 4 is not a single pillar electrode portion substantially perpendicularly extending from a principal plane of the stacked film as required by Claims 2 and 5. Similarly, a conductive portion C that connects the free layer 1 and the fixed layer 3 in Sakakima (see column 5, lines 11-21) does not have the features of the claimed single pillar electrode portion.

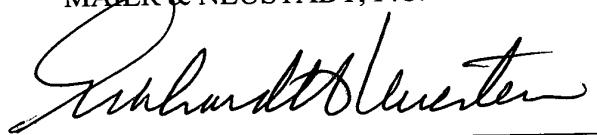
In addition, Sakakima does not teach or suggest a feed portion connected to the single pillar electrode portion and extending from the single pillar electrode portion substantially perpendicularly to a principal plane of the stacked film as required by Claims 2 and 5.

Accordingly, it is respectfully submitted that independent Claims 2 and 5 and each of the claims depending therefrom patentably distinguish over Sakakima.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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